9/648533

Refine Search

Search Results -

Terms	Documents
((telephon$ or phon$ or cell$) with platform$) and @ad<=20000526 and (music$ or song$ or album$)	32

Database:
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US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins
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Search: L22

[Refine Search]

[Recall Text ⬍] [Clear] [Interrupt]

Search History

DATE: Tuesday, November 16, 2004   Printable Copy   Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR		
L22	((telephon$ or phon$ or cell$) with platform$) and @ad<=20000526 and (music$ or song$ or album$)	32	L22
L21	L1	0	L21
	DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
L20	L19 and l6	0	L20
L19	L13 and platform$	2	L19
L18	L17 and platform$	0	L18
L17	L16 and multi$	4	L17
L16	L14 and l4	7	L16
L15	L14 and l5	0	L15
L14	6587873.pn. or 5926789.pn. or 6459776.pn. or 6266649.pn. or 6317722.pn. or 6605121.pn. or 6108406.pn. or 6330675.pn. or 6248946.pn. or 6311214.pn. or	14	L14

6418441.pn. or 6185541.pn. or 6154738.pn. or 5991737.pn.

6587873.pn. or 5926789.pn. or 6459776.pn. or 6266649.pn. or 6317722.pn. or
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6418441.pn. or 6185541.pn. or 6154738.pn. or 5991737.pn.

6587873.pn. or 5926789.pn. or 6459776.pn. or 6266649.pn. or 6317722.pn. or
L12   6605121.pn. or 6108406.pn. or 6330675.pn. or 6248946.pn. or 6311214.pn. or   3   L12
6418441.pn. or 6185541.pn. or 6154738.pn. or 5991737.pn.

L11	L8 and l5	0	L11
L10	L8 and l6	0	L10
L9	L8 and l7	0	L9
L8	379/?.ccls.	713	L8
L7	L6 and multi$	6	L7
L6	L5 and (music$ or song$ or album)	11	L6
L5	L4 and l1	36	L5
L4	L3 or l2	3730	L4
L3	705/14,26,27.ccls.	1699	L3
L2	707/102.ccls.	2072	L2
L1	((telephon$ or phon$ or cell$) with platform$) and @ad<=20000526	3621	L1

END OF SEARCH HISTORY

☐ Generate Collection   Print

L22: Entry 2 of 32   File: PGPB   Oct 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030188313
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030188313 A1

TITLE: ELECTRONIC TELEVISION PROGRAM GUIDE WITH REMOTE PRODUCT ORDERING

PUBLICATION-DATE: October 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
ELLIS, MICHAEL DEAN	BOULDER	CO	US	
DAVIS, BRUCE	GREENWOOD VILLAGE	CO	US	
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APPL-NO: 09/ 428588   [PALM]
DATE FILED: October 27, 1999

CONTINUED PROSECUTION APPLICATION: This is a publication of a continued prosecution
application (CPA) filed under 37 CFR 1.53(d).

RELATED-US-APPL-DATA:
Application 09/428588 is a continuation-of US application 08/428809, filed April
24, 1995, ABANDONED
Application 08/428809 is a continuation-in-part-of US application 08/247101, filed
May 20, 1994, US Patent No. 5781246
Application 08/247101 is a continuation-in-part-of US application 08/119367, filed
September 9, 1993, US Patent No. 6418556

INT-CL: [07] H04 N 5/50, G06 F 13/00

US-CL-PUBLISHED: 725/60
US-CL-CURRENT: 725/60

REPRESENTATIVE-FIGURES: 6A

ABSTRACT:

An electronic program schedule system with product ordering capability which
includes a data processor for receiving program schedule information for a
plurality of programs, and a user control apparatus, such as a remote controller,
for generating user control commands and transmitting signals to the data processor
in response thereto. The television program schedule information is displayed on a
display apparatus such as a television receiver. A video display generator receives
video control commands from the data processor and program schedule information and
displays a portion of the program schedule information on the receiver. The program
schedule information indicates the availability of a product or service for certain

●   ●

of the programs included in the program information, wherein the product or service is associated with the program, such as a program transcript or videocassette. The viewer utilizes the remote control apparatus to generate a first command for displaying information on the receiver describing the product or service, and a second command for placing an order for the product or service. The data processor receives the user control commands and in response to the first command causes the video display generator to display information describing the product or service and in response to the second command generates an order for the product or service.

[0001] This application is a continuation of U.S. patent application Ser. No. 08/428,809, filed Apr. 24, 1995, which is a continuation-in-part of U.S. patent application Ser. No. 08/247,101, filed May 20, 1994, now U.S. Pat. No. 5,781,246, which in turn is a continuation-in-part of U.S. patent application Ser. No. 08/119,367, filed Sep. 9, 1993.

L22: Entry 2 of 32   File: PGPB   Oct. 2, 2003

DOCUMENT-IDENTIFIER: US 20030188313 A1
TITLE: ELECTRONIC TELEVISION PROGRAM GUIDE WITH REMOTE PRODUCT ORDERING

Application Filing Date:
19991027

Brief Description of Drawings Paragraph:
[0090] FIG. 46 illustrates the product or service ordering feature in conjunction with program information for a music program.

Detail Description Paragraph:
[0210] Text editing may be necessary in other situations besides that where multiple size grid cells are used for display of the same title. For example, the disclosed program guide may run on several different platforms, with each one having different constraints and grid cell space availability. Some may not display the text in proportional fonts and some may have other limitations reducing the available space. Thus, in the preferred embodiment the interactive program would request edits for all platforms for which they required at the same time. In addition, editing of text may be required for display modes other than a grid of program listings. For example, in the "Listings by Channel" display of FIG. 20, programs are listed on an entire, fixed-length line, but the length of the line may vary from platform to platform, so that the text fit system may be employed for the purpose of editing listings for the different platforms in this display mode as well. The space available for the display of text will also depend on how much space is reserved for icon display. The same process as that shown in FIG. 42 would apply, except that there would be no need to determine what grid sizes are needed because a fixed length line is used for display rather than multiple sized grid cells.

Detail Description Paragraph:
[0220] The use of the disclosed product and service ordering capability need not be limited to television programs. For example, if the cable system operator or other program provider provides music as well as television channels, products and services associated with music programs may also be ordered through the guide. FIG. 46 illustrates one embodiment of a screen that may be used for ordering a product or service associated with a music program. Products that may be ordered include a CD or cassette tape of the song or album. The ordering service may also be used to order tickets to an upcoming concert of the artist that performs the selected music program.

A

L22: Entry 6 of 32   File: PGPB   Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030021259
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030021259 A1

TITLE: APPARATUS AND METHODS FOR COORDINATING INTERNET PROTOCOL TELEPHONE AND DATA COMMUNICATIONS

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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TORBA, DMITRY A.	SAN BRUNO	CA	US	
NEYMAN, IGOR	PALO ALTO	CA	US	
TUROVSKY, OLEG	SAN FRANCISCO	CA	US	

APPL-NO: 09/ 010940   [PALM]
DATE FILED: January 22, 1998

CONTINUED PROSECUTION APPLICATION: This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).

RELATED-US-APPL-DATA:
Application 09/010940 is a continuation-of US application 08/548178, filed October 25, 1995, ABANDONED
Application 09/010940 is a continuation-of US application 08/594628, filed February 2, 1996, US Patent No. 6130933
Application 09/010940 is a continuation-of US application 08/677204, filed July 9, 1996, US Patent No. 5825870
Application 09/010940 is a continuation-of US application 08/782983, filed January 14, 1997, US Patent No. 5915012
Application 09/010940 is a continuation-of US application 08/798236, filed February 11, 1997, US Patent No. 5926538
Application 09/010940 is a continuation-of US application 08/786817, filed January 21, 1997, US Patent No. 5933492
Application 09/010940 is a continuation-of US application 08/795680, filed February 6, 1997, US Patent No. 5765033

INT-CL: [07] H04 L 12/28

US-CL-PUBLISHED: 370/352; 370/351
US-CL-CURRENT: 370/352; 370/351

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A telephony call center system comprises an Internet connection adapted for receiving data from a WEB server, the data originating from the computer platform of a person browsing the Internet, including data identifying the browsing person, such as a telephone number, an IP address or the like, and indicating to the WEB server a desire of the browsing person to communicate with an agent at the call center. The communication desired may be (a) a request for an agent at the call center to receive a call from the browsing person, or (b) a request for a call to be placed to the browsing person from the call center. In both (a) and (b) the practical result is a telephone conference between the browsing person and an agent at the call center. In the first instance (a), in response to the data from the WEB server to the call center, the call center provides to the WEB server, for transfer to the browsing person via the Internet, necessary data for the browsing person to place an Internet Protocol Network Telephony (IPNT) call to the browsing person, utilizing Internet Telephony software at the browsing person's PC. The call center selects an agent, and initiates a watch for an arriving IPNT call from the browsing person. On arrival of the call, the call is routed to the selected agent. In the other instance (b), in response to the data, the call center enters the browsing person's information, determines the appropriate IP address, and places an IPNT call to the browsing person. When the call placed from the center is answered, it is switched to a selected agent.

A

L22: Entry 7 of 32   File: PGPB   Nov 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020172333
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020172333 A1

TITLE: SINGLE TELEPHONE NUMBER ACCESS TO MULTIPLE COMMUNICATIONS SERVICES

PUBLICATION-DATE: November 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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GALVAN, THOMAS J.	HAWATHA	IA	US	
CHIB, RUPIKA	CHEVY CHASE	MD	US	

APPL-NO: 09/ 413845   [PALM]
DATE FILED: October 7, 1999

CONTINUED PROSECUTION APPLICATION: This is a publication of a continued prosecution
application (CPA) filed under 37 CFR 1.53(d).

RELATED-US-APPL-DATA:
Application 09/413845 is a division-of US application 08/925447, filed September 8,
1997, ABANDONED

INT-CL: [07] H04 M 1/64

US-CL-PUBLISHED: 379/88.22
US-CL-CURRENT: 379/88.22

REPRESENTATIVE-FIGURES: 1A

ABSTRACT:

A platform provides access to multiple telecommunications services via a single
telephone number. These services may include, for example, voicemail services,
facsimile messaging services, paging services, and outbound calling services. A
guest caller may call the single phone number to speak to a subscriber, leave a
voicemail message for a subscriber, leave a facsimile message for a subscriber, or
place a page to a subscriber. A subscriber may call the phone number to place
outbound calls. In addition, a subscriber may call the single phone number to
retrieve or send facsimile messages and/or voicemail messages. A subscriber may
also call the phone number to configure service options. For instance, a subscriber
may select routing options and choose what services are available to guest callers.

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L22: Entry 7 of 32   File: PGPB   Nov 21, 2002

DOCUMENT-IDENTIFIER: US 20020172333 A1
TITLE: SINGLE TELEPHONE NUMBER ACCESS TO MULTIPLE COMMUNICATIONS SERVICES

Abstract Paragraph:
A platform provides access to multiple telecommunications services via a single
telephone number. These services may include, for example, voicemail services,
facsimile messaging services, paging services, and outbound calling services. A
guest caller may call the single phone number to speak to a subscriber, leave a
voicemail message for a subscriber, leave a facsimile message for a subscriber, or
place a page to a subscriber. A subscriber may call the phone number to place
outbound calls. In addition, a subscriber may call the single phone number to
retrieve or send facsimile messages and/or voicemail messages. A subscriber may
also call the phone number to configure service options. For instance, a subscriber
may select routing options and choose what services are available to guest callers.

Application Filing Date:
19991007

Summary of Invention Paragraph:
[0004] The present invention provides a service node or platform for providing
multiple communications services on behalf of a party known as a subscriber. The
platform may be implemented using a computer system such as a server system that
has an interface for interfacing with a telephone network. The platform may provide
service for multiple subscribers. Each subscriber may have a single phone number
through which access to all of the services that are provided by the platform may
be realized.

Summary of Invention Paragraph:
[0005] The platform may provide a variety of different telecommunications services.
For example, the platform may provide voicemail messaging services, facsimile
messaging services, electronic mail messaging services, paging services, call
routing services, and other types of services. Thus, the single platform may
receive voicemail messages, electronic mail messages, pages, facsimile messages,
and phone calls for the subscriber. The services that are available to respective
subscribers may be configurable such that different subscribers have different
services. The billing associated with using these services may also be configurable
to be billed to a single account, a corporate account or to separate accounts.

Detail Description Paragraph:
[0033] The preferred embodiment of the present invention provides a platform for
enabling multiple telecommunications services to be accessible through a single
telephone number. Thus, for example, access to paging services, facsimile services,
routing services, voicemail services, calling card services, conference call
services and 800 services, may be reached through a single telephone number with or
without personal identification numbers (PINs). The subscriber has complete control
over access to these services. In particular, the subscriber may specify what
services are available to what people at what time. Hence, a first subset of the
services to which the subscriber subscribes may be available to a first party at a
first time and a second subset of services may be available to a second party at a

second time. Moreover, a single party may have access to different subsets of the services depending on what time it is. The platform of the preferred embodiment of the present invention also provides the subscriber with the ability to place multiple calls from any location using the same telephone number and billing all the calls to a single account.
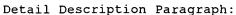
Detail Description Paragraph:
[0036] In one embodiment of the present invention, a subscriber is assigned multiple PINs. Each PIN is a short sequence of numeric characters or DTMF tones. Each PIN is associated with a different service configuration. One of the PINs is assigned solely for use by the subscriber, and when the subscriber calls his assigned telephone number and enters his PIN, the platform knows that it is the subscriber who is calling and offers subscriber only services. The other PINs may be assigned to different service profiles. These PINs may be distributed to appropriate parties to specify what services would be available to those parties. For example, a first PIN may be given to family members of a subscriber, whereas a second PIN may be given to business associates of the subscriber. As a result, family members will have access to a first set of services and business associates will have access to a second set of services. PINs may also be used to distinguish between subscribers such that each subscriber has a unique associated PIN or PINs.

Detail Description Paragraph:
[0038] FIG. 1 A is a block diagram that illustrates a first system architecture for practicing the preferred embodiment of the present invention, where the system architecture is part of a larger telecommunications network. The system includes a platform 10 that encompasses multiple components. The platform 10 provides single telephone number access to multiple telecommunications services for a subscriber. The subscriber, in this context, is the customer to whom the single telephone number is assigned. The single telephone number may be accessed by both the subscriber and callers to the subscriber (i.e., guests). The platform 10 includes an automated call distributor (ACD) for performing access and switching functions. The ACD 18 routes incoming calls to the appropriate components within the platform for properly handling the calls. The ACD 18 is a conventional digital matrix switch that includes programs for performing call queuing and distribution. A suitable ACD is the Northern Telecom DMS-100. Those skilled in the art will appreciate that a number of different types of switching mechanisms may be used, including those that support call conferencing.

Detail Description Paragraph:
[0051] FIG. 2 provides an overview of the steps that are performed when a call is placed to a phone number that is assigned to a subscriber. Initially, the call originator 12 places a call to the phone number that is assigned to a subscriber, and this call is switched via the switch network 14 to the ACD 18 within the platform 10 (step 50 in FIG. 2). The ACD 18 receives the call along with information regarding the dialed phone number and automatic number identifier (ANI) of the caller (step 52 in FIG. 2). The ANI is a value that uniquely identifies the calling phone number. The ACD 18 then queries the AP 46 with the subscriber telephone number to obtain routing directions. The AP 46 uses the subscriber telephone number as a key to a look-up table to determine where to route the call (step 56 in FIG. 2). Given that the telephone number is a specially designated telephone number for providing multiple telecommunications services through a single number, the AP sends a response message to the ACD 18 that instructs the ACD to route the call to the NAS 22 of the ARU 20 (step 58 in FIG. 2). In addition, the AP 46 sends a message to the ACP 24 of the ARU 20 that includes call context information (step 60 in FIG. 2). The call context information may include the subscriber phone number, ANI, PIN, and other information. When a PIN is used, the ARU may prompt the user to provide the caller with the PIN when the ARU initially receives the call. The ACP 24 uses this call context information to retrieve a subscriber profile from the NIDS 27 (FIG. 1A) to determine what script to execute (step 62 in FIG. 2). The profiles are described in more detail below.

Detail Description Paragraph:
[0067] With Findme routing, a subscriber may specify multiple terminating telephone numbers that the platform 10 can call to reach the subscriber. For example, the subscriber may specify up to three phone numbers that are attempted in sequence. A subscriber might specify his office number first, his cellular number second and his home number third. When such Findme routing is applied, the ARU 20 places the caller on hold while it places calls to these numbers in sequence. FIG. 6A is a flowchart illustrating the steps that are performed in such an instance. The ARU 20 tries the next phone number in the find me sequence (step 98 is FIG. 6A). The ARU then determines whether it gets a live answer or not (i.e., whether a person answers the phone call) (step 100 in FIG. 6A). If the call results in a ring no answer (RNA) after a specified number of rings, or if the call is picked up by an answering machine, the call is terminated, and the ARU attempts to place a call to the next number in the sequence (see step 98 in FIG. 6A) provided that all of the numbers have not been exhausted (see step 164). When all numbers have been exhausted, the caller may be asked to call again, leave a voice message, or choose between leaving voicemail or paging.

Detail Description Paragraph:
[0079] The VFP 32 receives the call and plays a greeting for caller, which may either be a standard system greeting, a custom greeting prerecorded by the subscriber or other customized greeting chosen by the subscriber (step 150 in FIG. 8). The subscriber profile may specify which greeting to play. The guest caller then leaves a voicemail message (step 152 in FIG. 8). The VFP prompts the caller to enter a callback number and attaches the ANI (if entered) to the voicemail message. As a result, when the subscriber retrieves the voicemail message, the subscriber may place an outbound call to the caller using the ANI for a dialed number. This is exploited in the auto-callback feature described below. The VFP 32 also takes action (such as incrementing a counter) to identify the arrival of the voicemail message (step 154 in FIG. 8A). The VFP 32 may also, at the subscriber's option, play music while a caller is on hold.

Detail Description Paragraph:
[0106] A subscriber may also place a call via the platform 10. A subscriber may place a call by selecting a speed-dial number, an international number, a domestic number or via operator assistance. Moreover, the platform may include intelligence for presenting the user with predefined phone number options and placing a call after the user has selected one of the options. All of these calls may be billed to the single account associated with the subscriber phone number. A number of other billing options may also be employed, including billing the calls to a corporate account to which other subscribers may also bill calls. These calls may also be billed to a credit card or a calling card account as specified by the subscriber. FIGS. 16A and 16B show the steps that are performed in such an instance.

Detail Description Paragraph:
[0113] A subscriber may also access certain administrative functions by calling the platform, using the subscriber telephone number. The subscriber chooses the administration option from the subscriber menu (see step 342 in FIG. 17). The subscriber is then presented with an administration menu (step 344 in FIG. 17) which presents the subscriber the menu options of: list maintenance, record greetings, and activate/deactivate features. If the subscriber chooses the list maintenance option (see step 746 in FIG. 17) the subscriber is able to alter and review broadcast lists as well as speed-dial lists. The subscriber may instead choose to record new greetings (see step 348 in FIG. 17). This administration function allows the user to record greetings, such as the mailbox name and a welcome message (step 354 in FIG. 17).

CLAIMS:

9. In a telecommunications system, a <u>platform</u> for providing access to multiple telecommunications services on behalf of a subscriber, comprising: an interface for providing access to the multiple telecommunications services via a single <u>phone</u> number; a voicemail system for recording voicemail messages for a subscriber; and a speech recognizer for converting the voicemail messages into textual representations.

33. The <u>platform</u> of claim 32 wherein the event facility receives an event that identifies receipt of a <u>phone</u> call for the subscriber.

65. The <u>platform</u> of claim 9, further comprising an automated <u>telephone</u> number dialing system for automatically dialing a stored <u>telephone</u> number.

82. The <u>platform</u> of claim 32, further comprising an automatic <u>telephone</u> dialing system for automatically dialing stored <u>telephone</u> numbers.

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L22: Entry 9 of 32   File: PGPB   Oct 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020149670
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020149670 A1

TITLE: VIDEO PHONE FORM FACTOR

PUBLICATION-DATE: October 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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WALKER, HOPTON S.	PASSAIC COUNTY	NJ	US	

APPL-NO: 09/ 001583   [PALM]
DATE FILED: December 31, 1997

CONTINUED PROSECUTION APPLICATION: This is a publication of a continued prosecution
application (CPA) filed under 37 CFR 1.53(d).

INT-CL: [07] H04 N 7/14

US-CL-PUBLISHED: 348/14.01; 348/14.08
US-CL-CURRENT: 348/14.01; 348/14.08

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A flat screen videophone has a microprocessor card located behind the video
display, and an associated keyboard, and can be supported for convenient use in a
variety of locations, such as on a wall, under a cabinet or shelf, or on a desk or
counter. Wall-mounted versions suspend the keyboard on an adjustable bracket which
holds the keyboard in an oblique use position, or in a storage position flat
against the wall below the videophone housing. On under-cabinet versions the
bracket-mounted keyboard can be swung behind the housing for storage, while the
housing can be slid to the rear for storage, or swung upwardly for storage. Desk-
top models have one or more cradles for storing the keyboard flat against the
housing.

The housing can support peripheral devices, such as a printer, a scanner or a fax
machine. Other devices may include a microphone, a camera, a motion sensor, a light
sensor, a card reader, a telephone handset, and loudspeakers.

L22: Entry 9 of 32   File: PGPB   Oct 17, 2002

DOCUMENT-IDENTIFIER: US 20020149670 A1
TITLE: VIDEO PHONE FORM FACTOR

Application Filing Date:
19971231

Summary of Invention Paragraph:
[0007] The new architecture may utilize a videophone and/or other devices to provide new services to an end user; an intelligent services director (ISD) disposed at or near the customer's premises for multiplexing and coordinating many digital services onto a single twisted-pair line; a facilities management platform (FMP) disposed in the local telephone network's central office for routing data to an appropriate interexchange company network; and a network server platform (NSP) coupled to the FMP for providing new and innovative services to the customer and for distinguishing services provided by the interexchange companies from those services provided by the local telephone network.

Detail Description Paragraph:
[0035] As shown in FIG. 2, in some embodiments the ISD 22 may include a controller 100 which may have any of a variety of elements such as a central processing unit 102, a DRAM 103, an SRAM 104, a ROM 105 and/or an internet protocol (IP) bridge router 106 connecting the controller 100 to a system bus 111. The system bus 111 may be connected with a variety of network interface devices 110. The network interface devices 110 may be variously configured to include an integrated services digital network (ISDN) interface 113, an Ethernet interface 119 (e.g., for 28.8 kbs data, 56 kbs data, or ISDN), an IEEE 1394 "fire wire" interface 112 (e g., for a digital videodisc device (DVD)), a TVRC modem interface 114) (e.g., for a digital subscriber line (DSL) modem), a residential interface 114, (e.g., standard POTS phone systems such as tip ring), a business interface 116 (e.g., a T1 line and/or PABX interface), a radio frequency (RF) audio/video interface 120 (e.g., a cable television connection), and a cordless phone interface 123 (e.g., a 900 MHZ transceiver). Connected to one of the network interfaces and/or the system bus 111 may be any number of devices such as an audio interface 122 (e.g., for digital audio, digital telephones, digital audio tape (DAT) recorders/players, music for restaurants, MIDI interface, DVD, etc.), a digital phone 121, a videophone/user interface 130, a television set-top device 131 and/or other devices. Where the network interface is utilized, it may be desirable to use, for example, the IEEE 1394 interface 112 and/or the Ethernet interface 119.

Detail Description Paragraph:
[0039] In still further embodiments, the ISD 22 may be compatible with multicast broadcast services where multicast information is broadcast by a central location and/or other server on one of the networks connected to the FMP 32, e.g., an ATM-switched network. The ISD 22 may download the multicast information via the FMP 32 to any of the devices connected to the ISD 22. The ISD 22 and/or CPE 10 devices may selectively filter the information in accordance with a specific customer user's preferences. For example, one user may select all country music broadcasts on a particular day while another user may select financial information. The ISD 22 and/or any of the CPE 10 devices may also be programmed to store information representing users' preferences and/or the received uni-cast or multicast

information in memory or other storage media for later replay. Thus, for example, video clips or movies may be multicast to all customers in the community with certain users being preconfigured to select the desired video clip/movie in real time for immediate viewing and/or into storage for later viewing.

Hit List

Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: JP 2003532937 W, WO 200043905 A1, AU 200026291 A, US 6247130 B1, EP 1163602 A1

Using default format because multiple data bases are involved.

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    L9: Entry 1 of 1                    File: DWPI            Nov 5, 2003
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DERWENT-ACC-NO: 2000-618607
DERWENT-WEEK: 200377
COPYRIGHT 2004 DERWENT INFORMATION LTD
TITLE: Network based digital music distribution system for e-commerce application,
confirms validity of user entered unique identifier, and displays shopping list
including items such as CD containing encoded music
```
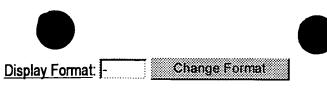
```
INVENTOR: FRITSCH, B
```

```
PRIORITY-DATA: 2000US-0487372 (January 18, 2000), 1999US-116778P (January 22,
1999), 1999US-116779P (January 22, 1999), 1999US-116780P (January 22, 1999),
1999US-116910P (January 22, 1999), 1999US-116917P (January 22, 1999), 1999US-
116918P (January 22, 1999)
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PATENT-FAMILY:
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PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2003532937 W	November 5, 2003		075	G06F017/60
WO 200043905 A1	July 27, 2000	E	040	G06F017/00
AU 200026291 A	August 7, 2000		000	
US 6247130 B1	June 12, 2001		000	G06F001/24
EP 1163602 A1	December 19, 2001	E	000	G06F017/00

```
INT-CL (IPC): G06 F 1/24; G06 F 17/00; G06 F 17/30; G06 F 17/60; G10 K 15/02
```

Terms	Documents
L8 AND (MUSIC$ WITH TRACK)	1

Display Format: |- ☐ ▒▒Change Format▒▒

Previous Page   Next Page   Go to Doc#

End of Result Set

☐ ▓▓▓ Generate Collection ▓▓▓ | Print |

L9: Entry 1 of 1   File: DWPI   Nov 5, 2003

DERWENT-ACC-NO: 2000-618607
DERWENT-WEEK: 200377
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Network based digital music distribution system for e-commerce application,
confirms validity of user entered unique identifier, and displays shopping list
including items such as CD containing encoded music

INVENTOR: FRITSCH, B

PATENT-ASSIGNEE: MCY MUSIC WORLD INC (MCYMN), FRITSCH B (FRITI)

PRIORITY-DATA: 2000US-0487372 (January 18, 2000), 1999US-116778P (January 22,
1999), 1999US-116779P (January 22, 1999), 1999US-116780P (January 22, 1999),
1999US-116910P (January 22, 1999), 1999US-116917P (January 22, 1999), 1999US-
116918P (January 22, 1999)

▓▓▓ Search Selected ▓▓▓ | ▓▓▓ Search ALL ▓▓▓ | ▓▓▓ Clear ▓▓▓ |

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	JP 2003532937 W	November 5, 2003		075	G06F017/60
☐	WO 200043905 A1	July 27, 2000	E	040	G06F017/00
☐	AU 200026291 A	August 7, 2000		000	
☐	US 6247130 B1	June 12, 2001		000	G06F001/24
☐	EP 1163602 A1	December 19, 2001	E	000	G06F017/00

DESIGNATED-STATES: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW AT BE CH CY DE
DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW AL AT
BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2003532937W	January 24, 2000	2000JP-0595259	
JP2003532937W	January 24, 2000	2000WO-US01833	
JP2003532937W		WO 200043905	Based on
WO 200043905A1	January 24, 2000	2000WO-US01833	
AU 200026291A	January 24, 2000	2000AU-0026291	
AU 200026291A		WO 200043905	Based on

US 6247130B1	January 22, 1999	1999US-116778P	Provisional
US 6247130B1	January 22, 1999	1999US-116779P	Provisional
US 6247130B1	January 22, 1999	1999US-116780P	Provisional
US 6247130B1	January 22, 1999	1999US-116910P	Provisional
US 6247130B1	January 22, 1999	1999US-116917P	Provisional
US 6247130B1	January 22, 1999	1999US-116918P	Provisional
US 6247130B1	January 18, 2000	2000US-0487372	
EP 1163602A1	January 24, 2000	2000EP-0904552	
EP 1163602A1	January 24, 2000	2000WO-US01833	
EP 1163602A1		WO 200043905	Based on

INT-CL (IPC): <u>G06</u> <u>F</u> <u>1</u>/<u>24</u>; <u>G06</u> <u>F</u> <u>17</u>/<u>00</u>; <u>G06</u> <u>F</u> <u>17</u>/<u>30</u>; <u>G06</u> <u>F</u> <u>17</u>/<u>60</u>; <u>G10</u> <u>K</u> <u>15</u>/<u>02</u>

RELATED-ACC-NO: 2000-543271

ABSTRACTED-PUB-NO: US 6247130B
BASIC-ABSTRACT:

NOVELTY - A login screen is displayed or a video monitor which allows a user (18)
to enter a unique identifier to access database information. On confirming the
validity of the unique identifier, a shopping list including items such as compact
disc containing digitized encoded music is displayed. The user purchases the
selected items for downloading to a user's computer.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for method to
distribute products over the internet.

USE - For <u>distribution</u> of digital <u>musical</u> products over the internet by web site
vendor for e-com applications, to purchase individual <u>tracks and albums</u>.

ADVANTAGE - The system provides digital <u>music distribution</u> web site which is
comprehensive, versatile, user friendly and protects the proprietary rights of
<u>artists</u> and other right holders. The system displays shopping history for each user
for limited downloading of the previously purchased items. It also prohibits an
unauthorized transfer of downloaded music files for playback by an unregistered
user.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of network based
digital <u>music distribution</u> system.

User 18

ABSTRACTED-PUB-NO: WO 200043905A
EQUIVALENT-ABSTRACTS:

NOVELTY - A login screen is displayed or a video monitor which allows a user (18)
to enter a unique identifier to access database information. On confirming the
validity of the unique identifier, a shopping list including items such as compact
disc containing digitized encoded music is displayed. The user purchases the
selected items for downloading to a user's computer.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for method to
distribute products over the internet.

USE - For <u>distribution</u> of digital <u>musical</u> products over the internet by web site vendor for e-com applications, to purchase individual <u>tracks and albums</u>.

ADVANTAGE - The system provides digital <u>music distribution</u> web site which is comprehensive, versatile, user friendly and protects the proprietary rights of <u>artists</u> and other right holders. The system displays shopping history for each user for limited downloading of the previously purchased items. It also prohibits an unauthorized transfer of downloaded music files for playback by an unregistered user.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of network based digital <u>music distribution</u> system.
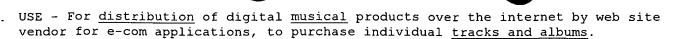
User 18

CHOSEN-DRAWING: Dwg.1D/7

DERWENT-CLASS: P86 T01 W01 W02
EPI-CODES: T01-H07C3A; T01-H07C5E; W01-A06B7; W02-F10C;

Hit List

Search Results - Record(s) 1 through 10 of 45 returned.

☐ 1. Document ID: JP 2003131674 A

Using default format because multiple data bases are involved.
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L8: Entry 1 of 45                    File: JPAB              May 9, 2003
```

```
PUB-NO: JP02003131674A
DOCUMENT-IDENTIFIER: JP 2003131674 A
TITLE: MUSIC SEARCH SYSTEM

PUBN-DATE: May 9, 2003

INVENTOR-INFORMATION:
NAME                                              COUNTRY
YOSHIKAWA, TADAYUKI
ASO, TOSHIE

INT-CL (IPC): G10 K 15/04; G06 F 17/30
```

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | | Claims | KWIC | Draw De |

☐ 2. Document ID: JP 2003015662 A
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L8: Entry 2 of 45                    File: JPAB              Jan 17, 2003
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```
PUB-NO: JP02003015662A
DOCUMENT-IDENTIFIER: JP 2003015662 A
TITLE: SYSTEM AND METHOD FOR PROVIDING PRESENTATION ENVIRONMENT
```

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | | Claims | KWIC | Draw De |

☐ 3. Document ID: JP 2002341880 A
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L8: Entry 3 of 45                    File: JPAB              Nov 29, 2002
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```
PUB-NO: JP02002341880A
DOCUMENT-IDENTIFIER: JP 2002341880 A
TITLE: MUSIC DATA DISTRIBUTION SYSTEM
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| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | | Claims | KWIC | Draw De |

☐ 4. Document ID: JP 2002330363 A

L8: Entry 4 of 45   File: JPAB   Nov 15, 2002

PUB-NO: JP02002330363A
DOCUMENT-IDENTIFIER: JP 2002330363 A
TITLE: RECEIVER AND RECEPTION SYSTEM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 5. Document ID: JP 2002202783 A

L8: Entry 5 of 45   File: JPAB   Jul 19, 2002

PUB-NO: JP02002202783A
DOCUMENT-IDENTIFIER: JP 2002202783 A
TITLE: MUSIC DISTRIBUTION SYSTEM, MUSIC DISTRIBUTION METHOD, AND TERMINAL DEVICE
USED FOR MUSIC DISTRIBUTION

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 6. Document ID: JP 2002149165 A

L8: Entry 6 of 45   File: JPAB   May 24, 2002

PUB-NO: JP02002149165A
DOCUMENT-IDENTIFIER: JP 2002149165 A
TITLE: ON-VEHICLE AUDIO UNIT

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 7. Document ID: JP 2002123272 A

L8: Entry 7 of 45   File: JPAB   Apr 26, 2002

PUB-NO: JP02002123272A
DOCUMENT-IDENTIFIER: JP 2002123272 A
TITLE: MUSIC DATA DISTRIBUTION SYSTEM, SERVER APPARATUS, INFORMATION TERMINAL, AND
METHOD FOR DISTRIBUTING MUSIC DATA

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 8. Document ID: JP 2002108355 A

L8: Entry 8 of 45   File: JPAB   Apr 10, 2002

PUB-NO: JP02002108355A
DOCUMENT-IDENTIFIER: JP 2002108355 A
TITLE: MUSIC DISTRIBUTION SYSTEM INFORMATION PROCESSOR AND RECORDING MEDIUM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D: |

☐ 9. Document ID: JP 2002023767 A

L8: Entry 9 of 45   File: JPAB   Jan 25, 2002

PUB-NO: JP02002023767A
DOCUMENT-IDENTIFIER: JP 2002023767 A
TITLE: METHOD FOR DISTRIBUTING MUSIC

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D: |

☐ 10. Document ID: JP 2002015118 A

L8: Entry 10 of 45   File: JPAB   Jan 18, 2002

PUB-NO: JP02002015118A
DOCUMENT-IDENTIFIER: JP 2002015118 A
TITLE: MUSIC SELLING SYSTEM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D: |

| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS |

Terms	Documents
L7	45

Display Format: |- | Change Format

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Hit List

Search Results - Record(s) 11 through 20 of 45 returned.

☐ 11. Document ID: JP 2002341880 A

Using default format because multiple data bases are involved.

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L8: Entry 11 of 45                    File: JPAB                Nov 29, 2002


PUB-NO: JP02002341880A
DOCUMENT-IDENTIFIER: JP 2002341880 A
TITLE: MUSIC DATA DISTRIBUTION SYSTEM

PUBN-DATE: November 29, 2002

INVENTOR-INFORMATION:
NAME                                           COUNTRY
UCHIDA, MIGAKU

INT-CL (IPC): G10 K 15/02; G06 F 17/30; G10 L 15/00
```

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 12. Document ID: JP 2002330363 A

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L8: Entry 12 of 45                    File: JPAB                Nov 15, 2002


PUB-NO: JP02002330363A
DOCUMENT-IDENTIFIER: JP 2002330363 A
TITLE: RECEIVER AND RECEPTION SYSTEM
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| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 13. Document ID: JP 2002202783 A

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L8: Entry 13 of 45                    File: JPAB                Jul 19, 2002


PUB-NO: JP02002202783A
DOCUMENT-IDENTIFIER: JP 2002202783 A
TITLE: MUSIC DISTRIBUTION SYSTEM, MUSIC DISTRIBUTION METHOD, AND TERMINAL DEVICE
USED FOR MUSIC DISTRIBUTION
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| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

y

14. Document ID: JP 2002149165 A

L8: Entry 14 of 45   File: JPAB   May 24, 2002

PUB-NO: JP02002149165A
DOCUMENT-IDENTIFIER: JP 2002149165 A
TITLE: ON-VEHICLE AUDIO UNIT

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

15. Document ID: JP 2002123272 A

L8: Entry 15 of 45   File: JPAB   Apr 26, 2002

PUB-NO: JP02002123272A
DOCUMENT-IDENTIFIER: JP 2002123272 A
TITLE: MUSIC DATA DISTRIBUTION SYSTEM, SERVER APPARATUS, INFORMATION TERMINAL, AND
METHOD FOR DISTRIBUTING MUSIC DATA

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

16. Document ID: JP 2002108355 A

L8: Entry 16 of 45   File: JPAB   Apr 10, 2002

PUB-NO: JP02002108355A
DOCUMENT-IDENTIFIER: JP 2002108355 A
TITLE: MUSIC DISTRIBUTION SYSTEM INFORMATION PROCESSOR AND RECORDING MEDIUM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

17. Document ID: JP 2002023767 A

L8: Entry 17 of 45   File: JPAB   Jan 25, 2002

PUB-NO: JP02002023767A
DOCUMENT-IDENTIFIER: JP 2002023767 A
TITLE: METHOD FOR DISTRIBUTING MUSIC

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

18. Document ID: JP 2002015118 A
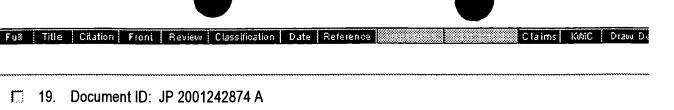
L8: Entry 18 of 45   File: JPAB   Jan 18, 2002

PUB-NO: JP02002015118A
DOCUMENT-IDENTIFIER: JP 2002015118 A
TITLE: MUSIC SELLING SYSTEM

19.   Document ID: JP 2001242874 A

L8: Entry 19 of 45   File: JPAB   Sep 7, 2001
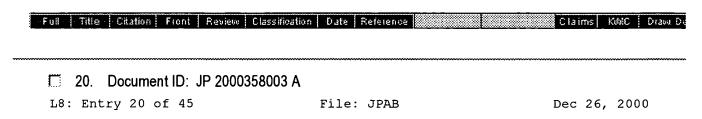
PUB-NO: JP02001242874A
DOCUMENT-IDENTIFIER: JP 2001242874 A
TITLE: <u>MUSIC DISTRIBUTION</u> SYSTEM, <u>MUSIC DISTRIBUTION</u> SYSTEM TERMINAL AND <u>MUSIC DISTRIBUTION</u> SYSTEM SERVER

20.   Document ID: JP 2000358003 A

L8: Entry 20 of 45   File: JPAB   Dec 26, 2000

PUB-NO: JP02000358003A
DOCUMENT-IDENTIFIER: JP 2000358003 A
TITLE: <u>MUSIC DISTRIBUTION</u> SYSTEM

| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS |

Terms	Documents
L7	45

Display Format: |-   Change Format

y

Hit List

Search Results - Record(s) 21 through 30 of 45 returned.

☐ 21. Document ID: JP 08033014 A

Using default format because multiple data bases are involved.

L8: Entry 21 of 45   File: JPAB   Feb 2, 1996

PUB-NO: JP408033014A
DOCUMENT-IDENTIFIER: JP 08033014 A
TITLE: SELECTIVE RADIO CALL RECEIVER

PUBN-DATE: February 2, 1996

INVENTOR-INFORMATION:
NAME   COUNTRY
MATSUHASHI, HISAHIRO
AKAMATSU, KENJI
NAKASE, TAKAFUMI

INT-CL (IPC): H04 Q 7/14; G10 K 15/04; H04 B 7/26; H04 B 1/16

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 22. Document ID: EP 1351217 A1

L8: Entry 22 of 45   File: EPAB   Oct 8, 2003

PUB-NO: EP001351217A1
DOCUMENT-IDENTIFIER: EP 1351217 A1
TITLE: MUSIC DISTRIBUTION-COMPATIBLE PORTABLE TERMINAL AND PORTABLE TERMINAL

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 23. Document ID: WO 9736233 A1

L8: Entry 23 of 45   File: EPAB   Oct 2, 1997

PUB-NO: WO009736233A1
DOCUMENT-IDENTIFIER: WO 9736233 A1
TITLE: METHOD FOR PROVIDING INFORMATION, METHOD FOR PREPARING INITIAL INFORMATION, AND DEVICE AND RECORDING MEDIUM USED THEREFOR

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 24. Document ID: US 20030236711 A1

L8: Entry 24 of 45   File: DWPI   Dec 25, 2003

DERWENT-ACC-NO: 2004-154869
DERWENT-WEEK: 200415
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Time-sensitive discount promotion offer providing method e.g. for book
marked music clips distribution, involves receiving discount promotion information
with set expiration time period corresponding to transmitted data marks

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 25. Document ID: JP 2004047047 A, WO 2003100783 A2

L8: Entry 25 of 45   File: DWPI   Feb 12, 2004

DERWENT-ACC-NO: 2004-023551
DERWENT-WEEK: 200413
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Information recording medium for electronic music distribution system, has
identification information indicating whether still picture information represents
album content or associated with audio information

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 26. Document ID: JP 2003249906 A

L8: Entry 26 of 45   File: DWPI   Sep 5, 2003

DERWENT-ACC-NO: 2003-883756
DERWENT-WEEK: 200382
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Recording-medium acquisition system for music distribution system, has media
information center that holds geography data of recording-medium dealer, and
searches dealer which transmitted desired stock information

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D |

☐ 27. Document ID: US 20030061301 A1

L8: Entry 27 of 45   File: DWPI   Mar 27, 2003

DERWENT-ACC-NO: 2003-439968
DERWENT-WEEK: 200341

●   ●

TITLE: Real-time music-on-demand system encrypts requested music and transmits to subscriber unit that decrypts received signals

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 28. Document ID: US 6555738 B2, US 20020152875 A1

L8: Entry 28 of 45   File: DWPI   Apr 29, 2003

DERWENT-ACC-NO: 2003-198401
DERWENT-WEEK: 200331
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Computer readable audio file sample creation method for record stores, kiosks, involves identifying starting and ending points for audio file sample at fixed times measured from beginning of audio file

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 29. Document ID: US 6670537 B2, US 20020152876 A1

L8: Entry 29 of 45   File: DWPI   Dec 30, 2003

DERWENT-ACC-NO: 2003-156172
DERWENT-WEEK: 200402
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Digital music clippings distribution method for music sales promotion, involves attaching audio samples to electronic-mails delivered to mail recipient

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 30. Document ID: JP 2002222369 A

L8: Entry 30 of 45   File: DWPI   Aug 9, 2002

DERWENT-ACC-NO: 2002-623837
DERWENT-WEEK: 200267
COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Content distribution system e.g. for audio music, provides discount service to user while downloading content from server to user's mobile telephone for pay

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS |

Terms	Documents
L7	45

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Generate Collection   Print

L13: Entry 4 of 15   File: USPT   Oct 1, 2002

DOCUMENT-IDENTIFIER: US 6459776 B1
TITLE: System and method for personalized multimedia messaging

Abstract Text (1):
A method and system for personalized multimedia messaging include multiple
communication mode interfaces which enable the system to communicate with multiple
types of communication devices. Caller profiles are configured for preselected
callers such that each caller profile includes at least one caller identifier
representative of data patterns in incoming. calls received over the communication
modes. The caller profiles are selectively configured to include personalized
messages intended for a subset of the preselected callers and can also include
caller identity verification data. A caller identification subsystem monitors the
communication modes for incoming calls which include the data patterns. Upon
detecting one of the data patterns, a processor accesses a corresponding caller
profile and determines if the caller profile includes a personalized message. If a
personalized message includes confidential subject matter, the processor can
transmit a caller identity verification request to the incoming caller. The
processor compares received caller identity verification data to stored caller
identity verification data. If the received verification data matches the stored
verification data, the messaging system transmits the personalized message to the
caller. If no personalized message is associated with the caller profile, a general
message is transmitted to the caller, which might include a greeting that directs
the caller to leave a message. In a preferred embodiment, the personalized
messaging system is included in an IVR system which enables callers to interface
with the IVR system through multiple different communication modes based on the
same set of personalized caller preferences.

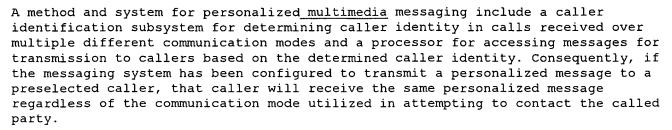Application Filing Date (1):
19980929

Brief Summary Text (2):
The present invention relates generally to systems and methods for providing
telecommunications messaging capabilities and, more specifically, to a system and
method for providing personalized messaging in a multimedia environment.

Brief Summary Text (6):
U.S. Pat. No. 5,768,513 to Kuthyar et al. describes a multimedia messaging system
wherein the calling party, during call setup, transmits a request to initiate a
multimedia call to a multimedia bridge which includes the called party's number and
the number of a message server. If the call goes unanswered, the multimedia bridge
initiates a call to the message server, which organizes mailbox functions according
the numbers of called parties. The call request from the multimedia bridge to the
message server includes the called party's number, which is utilized by the message
server to access the appropriate multimedia greeting. Because the message server is
not configured to access the appropriate multimedia greeting based on the identity
of calling parties, the message server is not configured to selectively transmit
personalized multimedia greetings to callers.

Brief Summary Text (9):

A method and system for personalized multimedia messaging include a caller
identification subsystem for determining caller identity in calls received over
multiple different communication modes and a processor for accessing messages for
transmission to callers based on the determined caller identity. Consequently, if
the messaging system has been configured to transmit a personalized message to a
preselected caller, that caller will receive the same personalized message
regardless of the communication mode utilized in attempting to contact the called
party.

Brief Summary Text (10):
In a preferred embodiment, the messaging system includes interfaces for
communication utilizing a public switch telephone network (PSTN), internet protocol
(IP) telephony, and electronic mail (e-mail). The interfaces enable the multimedia
messaging system to receive e-mail transmissions, IP telephony calls, and PSTN
calls, which may include any or all of telephone calls, pager transmissions, and
modem transmissions. Caller profiles are configured which include caller
identifiers associated with preselected callers. The caller identifiers are
representative of data patterns of transmissions from communication devices
utilized by the associated callers. For example, the caller identifiers include e-
mail addresses, IP addresses, and automatic number identifiers (ANIs) and caller
identity verification data. A caller profile for a particular caller might include
an e-mail address associated with the caller's e-mail account, a home telephone
ANI, a cellular phone ANI, an IP address associated with a telephony enabled
computer, and a caller identity verification code. Each caller profile further
includes data indicating whether a called party has recorded a personalized message
for the caller.

Brief Summary Text (14):
In a preferred embodiment, the personalized messaging system is incorporated into a
multimedia interactive voice response (IVR) system which includes multiple IVR
mailboxes. The IVR mailboxes include personalized mailboxes having personalized
greetings for preselected callers, menu mailboxes with menu selection messages,
informational mailboxes with informational messages, and a generalized greeting
mailbox. The generalized greeting mailbox includes a greeting which provides an
entry into the IVR system to first-time callers. The personalized greetings in the
personalized mailboxes provide preselected callers with a predetermined menu of
options of informational mailboxes and/or menu selection mailboxes from which to
select. In one embodiment, the composition of the menu of options in the
personalized mailboxes is at least partially determined by prior IVR sessions.

Drawing Description Text (2):
FIG. 1 is a high level block diagram of a multimedia messaging system according to
the present invention.

Drawing Description Text (3):
FIG. 2 is a first embodiment of the multimedia messaging system shown in FIG. 1
wherein the system is located within a data network.

Drawing Description Text (5):
FIG. 4 is a method of providing personalized messaging utilizing the multimedia
messaging system of FIG. 2 or FIG. 3.

Detailed Description Text (2):
With reference to FIG. 1, a multimedia messaging system is adapted for performing
personalized messaging utilizing multiple communication modes. The communication
modes include IP telephony 22, which preferably includes video telecommunications;
PSTN telephony 20, including digital, analog, wireless, and landline telephony;
paging 18; and e-mail 16. Of course, these communication modes are not mutually
exclusive. For example, an e-mail message can be transmitted over the PSTN, or it
can be transmitted over a data network, such as a LAN. The communications network

cloud 17 represents multiple voice and data networks utilized by communication
devices in attempts to communicate with a called party.

Detailed Description Text (6):
The messaging system can be located at any one of a number of locations, including
a central office of a PSTN, a private branch exchange, or a network server of a
data network. The precise equipment with which the messaging system is associated
is not critical, as long as the messaging system has access to multiple
communication modes. Referring to FIG. 2, in one embodiment the messaging system is
located in a network messaging server 40 on a data network such as a LAN 42. A
gateway 28 enables the network messaging server 40 to communicate with various
devices on a PSTN 30, such as a pager 38 and a telephone 36. The gateway 28 also
enables the messaging server 40 to communicate with a first computer 34 via the
global communications network known as the Internet 32. The messaging server
includes a LAN card 26 which enables the messaging server to communicate with the
gateway 28 and with second and third IP telephony enabled computers 44 and 46 on
the LAN 42. The second computer 44 is assigned to the called party and is
configured to transfer unanswered calls to the messaging server 40 after a
predetermined time interval.

Detailed Description Text (18):
With reference to FIG. 3, in a preferred embodiment, the multimedia messaging
system is employed within an interactive voice response (IVR) system. The
multimedia IVR system enables callers to access the IVR system from any of multiple
communication devices and to interface with the IVR system based on the same set of
stored caller preferences, regardless of which of the communication devices the
caller utilizes. The multimedia IVR system includes first and second personalized
mailboxes 54 and 56 which are associated respectively with first and second callers
and which include personalized messages for the first and second callers. The first
personalized mailbox 54 includes a message which prompts the first caller to select
an entry point in the IVR system of either menu2 mailbox 64, or a general mailbox
58. Menu1 mailbox 60 provides the option of selecting from menu2 mailbox 64 or
info3 mailbox 68. Menu2 mailbox 64 provides the option of selecting either info1 or
info2 mailboxes 74 and 76, which are both terminal mailboxes. The general mailbox
58 is the default point of entry into the IVR system. Second personalized mailbox
56 includes a message which prompts the second caller to select from entering the
IVR system at either menu11 mailbox 62, menu22 mailbox 72, or the general mailbox
58. Menu11 mailbox 62 prompts selection of either terminal info11 mailbox 70 or
menu22 mailbox 72, which in turn prompts selection of either info22 mailbox 78 or
info33 mailbox 80.

Detailed Description Text (19):
The menu options presented to first and second callers in the first personalized
mailbox 54 and the second personalized mailbox 56 are determined by caller
preferences 50 associated with the first and second callers. The caller preferences
50 can be automatically recorded based on a previous IVR session, or the
preferences can be entered into the system by a system administrator prior to the
first caller interaction with the IVR system. The multimedia IVR system includes IP
telephony mode 22, and PSTN telephony mode 20. The communication mode controller 14
selects the mode over which an outgoing mailbox message is transmitted.

Detailed Description Text (22):
If the first and second personalized mailboxes include sensitive confidential data,
it may be desirable to ascertain the actual identity of the caller in addition to
identifying the calling communication device. As in the multimedia messaging system
shown in FIG. 2, the caller identification sub-system of the multimedia IVR system
can include caller identity verification functions. The caller identity
verification can be based on an authorization code uniquely assigned to a
particular caller and/or a voice data comparison which regulates access by
requiring a caller to provide a voice sample which matches a stored voice sample in

one of the caller profiles.

Detailed Description Text (23):
With reference to FIGS. 2, 3, and 4, a method for providing personalized <u>multimedia</u> messaging includes the step 82 of configuring multiple caller profiles. Each caller profile includes caller identifiers representative of data transmission patterns which correspond to particular caller communication devices associated with a preselected caller. A typical caller profile might include caller identifiers representative of an IP address assigned to a first computer, an ANI assigned to a telephone, and an e-mail address associated with a second computer, with the first computer, the telephone, and the e-mail address all being operated by or assigned to the preselected caller. In the <u>multimedia</u> IVR embodiment, the caller profiles also include caller preferences that dictate a menu selection from a number of IVR mailboxes. Each of the caller profiles represents a set of communication devices utilized by a particular caller.
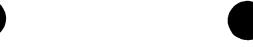
Detailed Description Text (26):
If the caller identity verification step is performed and the caller identity is verified, the personalized greeting is transmitted to the caller in step 96. In the <u>multimedia</u> messaging embodiment of FIG. 2, the personalized message can include an outgoing message followed by an instruction to record an incoming message. Alternatively, a primary outgoing message can prompt the caller to select from one of several subjects, each subject having an associated secondary message. For example, the primary message might request a sales person to select from secondary messages associated with multiple different sales accounts. Upon selection of one of the secondary messages, the selected secondary message is transmitted to the caller. Each subsequent incoming call by the caller from a communication device associated with a caller identifier 52 that is stored in the caller profile of the caller will be automatically recognized, and the messaging system will automatically transmit a personalized message to the caller, if a personalized message is associated with the caller's profile.

Detailed Description Text (27):
In the <u>multimedia</u> IVR embodiment of FIG. 3, the personalized message is associated with a personalized mailbox, for example first personalized mailbox 54, and the message includes a prompt for the caller to select from menu I mailbox 62 or menu22 mailbox 72. In step 98, the mailbox processor 48 records the mailbox selections made by the caller and at the conclusion of the current IVR session in step 100, the call identification subsystem 12 reconfigures the caller profile based on mailbox selections during the IVR session to allow the caller to resume the session in a subsequent call. The subsequent call can be made by the caller utilizing any of the communication modes which have corresponding identifiers 52 in the caller profile. Consequently, the user can interface with the IVR system in a first session through the PSTN telephony mode 20 and subsequently resume the first IVR session by interfacing with the IVR system in the IP telephony mode 22.
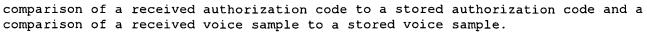
CLAIMS:

1. A method for performing personalized <u>multimedia</u> messaging based on identities of callers comprising the steps of: assigning caller profiles to selected callers, including configuring each caller profile to include message data intended for transmission to a selected caller, each caller profile further including at least one caller identifier that is indicative of reception of an incoming communication from said selected caller, at least some of said caller identifiers being specific to calling devices and at least some of said calling devices being mutually incompatible with respect to communication modes for operating said calling devices, said communication modes including at least one voice-specific mode and at least one text-specific mode; receiving incoming communications from said calling devices over said communication modes; monitoring said incoming communications for data patterns which are indicative of said calling devices; accessing a selected

one of said caller profiles upon detecting a particular data pattern based on a correspondence between said particular data pattern and a caller identifier that is included in said selected caller profile; selecting one of said communication modes for transmitting said message data included in said selected caller profile, said selecting being based on at least one of said selected call profile and said detecting of said particular data pattern; converting at least a portion of said message data included in said selected caller profile from a first format to a second format when it is determined that said first format is incompatible with a transmission in said selected communication mode; and transmitting said at least a portion of said message data included in said selected caller profile, said transmitting being in said selected communication mode.

8. A system for personalized <u>multimedia</u> messaging comprising: connectivity means for enabling a plurality of alternative communication modes for providing local access to and from remote communication devices; memory having stored personalized messages which are individually associated with caller identifiers that are specific to anticipated sources of incoming communications, each said personalized message having content intended for a particular caller; a caller identification subsystem configured to detect said caller identifiers of incoming communications from said remote communication devices over any one of said plurality of communication modes; means, responsive to said caller identification subsystem, for accessing said memory to select a specific personalized message in response to detection of a specific caller identifier, said specific personalized message being associated with said specific caller identifier in said memory; and means for transmitting said specific personalized message in a format compatible with a selected one of said communication modes, said means for transmitting being cooperative with said means for accessing to convert said content of said specific personalized message to said format in response to determining that said content is stored in said memory in a format compatible with an unselected one of said communication modes but incompatible with said selected one of said communication modes.

9. The system of claim 8 wherein said connectivity means is compatible with receiving said incoming communications in formats that include telephony over a public switch telephone network (PSTN), electronic mail (e-mail), and <u>internet</u> protocol (IP) telephony.

15. A <u>multimedia</u> interactive voice response (IVR) system comprising: a plurality of IVR <u>mailboxes,</u> including <u>first mailboxes</u> having stored personalized greetings to preselected callers, <u>second mailboxes</u> having stored menu selection messages, third <u>mailboxes</u> having stored informational messages, and a general <u>mailbox</u> having a stored generalized greeting; a plurality of caller profiles having: a) a plurality of caller identifiers representative of data patterns associated with incoming calls from said preselected callers, said caller identifiers being associated with a plurality of alternative means for establishing connectivity; and b) caller preferences indicative of preferences of said preselected callers for particular ones of said IVR mailboxes; a caller identification subsystem configured to monitor said plurality of means for establishing connectivity for said incoming calls which include said data patterns; a processor configured to access particular ones of said IVR mailboxes according to said caller preferences in response to detection of specific said data patterns; and means for transmitting data from said plurality of mailboxes over each of said means for establishing connectivity.

16. The <u>multimedia</u> IVR system of claim 15 wherein one of said plurality of IVR mailboxes includes a request for caller identity verification, said caller identification subsystem including means for verifying identities of said preselected callers.

17. The <u>multimedia</u> IVR system of claim 15 wherein said verifying means is configured to verify said identities of said preselected callers based on a

comparison of a received authorization code to a stored authorization code and a comparison of a received voice sample to a stored voice sample.

18. The multimedia IVR system of claim 17 wherein said means for verifying said preselected callers includes a code authorization processor and includes a speech analyzer.

19. The multimedia IVR system of claim 15 wherein said processor is configured to access said generalized greeting in the absence of detection of one of said data patterns by said caller identification subsystem.

20. The multimedia IVR system of claim 15 wherein said alternative means for establishing connectivity include IP telephony, PSTN telephony, and communication via pager transmissions.

Hit List

| Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs |

| Generate OACS |

Search Results - Record(s) 1 through 10 of 15 returned.

☐ 1.   Document ID: US 6611867 B1

L13: Entry 1 of 15   File: USPT   Aug 26, 2003

US-PAT-NO: 6611867
DOCUMENT-IDENTIFIER: US 6611867 B1

TITLE: System, method and article of manufacture for implementing a hybrid network

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 2.   Document ID: US 6611501 B1

L13: Entry 2 of 15   File: USPT   Aug 26, 2003

US-PAT-NO: 6611501
DOCUMENT-IDENTIFIER: US 6611501 B1

TITLE: Process management system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☐ 3.   Document ID: US 6563912 B1

L13: Entry 3 of 15   File: USPT   May 13, 2003

US-PAT-NO: 6563912
DOCUMENT-IDENTIFIER: US 6563912 B1

TITLE: System and method for providing integrated messaging

| Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De |

☑ 4.   Document ID: US 6459776 B1

L13: Entry 4 of 15   File: USPT   Oct 1, 2002

US-PAT-NO: 6459776
DOCUMENT-IDENTIFIER: US 6459776 B1

TITLE: System and method for personalized <u>multimedia</u> messaging

`| Full | Title | Citation | Front | Review | Classification | Date | Reference |░░░░░|░░░░░| Claims | KWIC | Draw De`

☐ 5. Document ID: US 6459774 B1

L13: Entry 5 of 15   File: USPT   Oct 1, 2002

US-PAT-NO: 6459774
DOCUMENT-IDENTIFIER: US 6459774 B1

TITLE: Structured voicemail messages

`| Full | Title | Citation | Front | Review | Classification | Date | Reference |░░░░░|░░░░░| Claims | KWIC | Draw De`

☐ 6. Document ID: US 6427132 B1

L13: Entry 6 of 15   File: USPT   Jul 30, 2002

US-PAT-NO: 6427132
DOCUMENT-IDENTIFIER: US 6427132 B1

TITLE: System, method and article of manufacture for demonstrating E-commerce
capabilities via a simulation on a network

`| Full | Title | Citation | Front | Review | Classification | Date | Reference |░░░░░|░░░░░| Claims | KWIC | Draw De`

☐ 7. Document ID: US 6393107 B1

L13: Entry 7 of 15   File: USPT   May 21, 2002

US-PAT-NO: 6393107
DOCUMENT-IDENTIFIER: US 6393107 B1

TITLE: Method and apparatus for creating and sending structured voicemail messages

`| Full | Title | Citation | Front | Review | Classification | Date | Reference |░░░░░|░░░░░| Claims | KWIC | Draw De`

☐ 8. Document ID: US 6345239 B1

L13: Entry 8 of 15   File: USPT   Feb 5, 2002

US-PAT-NO: 6345239
DOCUMENT-IDENTIFIER: US 6345239 B1

TITLE: Remote demonstration of business capabilities in an e-commerce environment

`| Full | Title | Citation | Front | Review | Classification | Date | Reference |░░░░░|░░░░░| Claims | KWIC | Draw De`

9. Document ID: US 6337858 B1

L13: Entry 9 of 15   File: USPT   Jan 8, 2002

US-PAT-NO: 6337858
DOCUMENT-IDENTIFIER: US 6337858 B1

TITLE: Method and apparatus for originating voice calls from a data network

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw De

10. Document ID: US 6240391 B1

L13: Entry 10 of 15   File: USPT   May 29, 2001

US-PAT-NO: 6240391
DOCUMENT-IDENTIFIER: US 6240391 B1

TITLE: Method and apparatus for assembling and presenting structured voicemail messages

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw De

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS

Terms	Documents
L11 and (multimedia or "multi-media")	15

Display Format: TI   Change Format

Previous Page   Next Page   Go to Doc#

Generate Collection   Print

L4: Entry 1 of 1   File: USPT   Jul 20, 1999

DOCUMENT-IDENTIFIER: US 5926789 A
** See image for Certificate of Correction **
TITLE: Audio-based wide area information system

Detailed Description Text (20):
. . Rock<a sample of rock music track is played >. . . "

☐ ▓▓▓▓▓ Generate Collection ▓▓▓▓▓ | Print

L5: Entry 1 of 1   File: USPT   Jul 20, 1999

DOCUMENT-IDENTIFIER: US 5926789 A
** See image for Certificate of Correction **
TITLE: Audio-based wide area information system

Detailed Description Text (20):
. . Rock<a sample of rock music track is played >. . . "

Detailed Description Text (33):
<a sample of the new Beatles track is played>. . . "

Detailed Description Text (39):
Client: "<The initial part of the new Beatles track `Free as a Bird` starts
playing>. . . "

Detailed Description Text (46):
Finally, a standard protocol for transmitting audio tracks is used.

Detailed Description Text (50):
Each hyperaudio link is associated with a portion of the audio track of an audio
page, in the same manner that a hypertext link in the WWW is associated with a
highlighted portion of the text on a page.

Detailed Description Text (51):
As mentioned above, when a user first connects to an Audio Web server, the first
audio page the user encounters is a home directory page, which is in the form of a
repeating audio track, generally listing a plurality of hyperaudio links. In order
to use this directory, the user issues a STOP command from the client, (for
example, when an audio link of interest is heard). The directory then provides an
option menu consisting of the last k (for example, five) hyperaudio links located
before the STOP command was issued. FIG. 3 illustrates the concept of the repeating
directory page, and, more specifically, the set of k hyperaudio links defined in a
window according to a STOP command issued by the user.

Detailed Description Text (52):
At this point, the user hears a new audio track naming the k hyperaudio links. Such
an audio track might be as follows:

Detailed Description Text (66):
When a user wants to search an audio track (which can be done at any time while the
audio track is being played), the user inputs a BACK or FORWARD command, as
appropriate. In response, the browser locates the middle time point $t.sub.m$ between
the current time position $t.sub.1$ in the audio track and the end or start of the
audio track, $t.sub.e$. The browser then plays the audio track from $t.sub.m$ forward.
If the user decides that the item being sought is before (i.e., to the "left" of)
$t.sub.m$, then a BACK command is issued, and the browser plays the audio starting
from the midpoint between $t.sub.1$ and $t.sub.m$. On the other hand, if the user
decides that the item being sought is after (i.e., to the "right" of) $t.sub.m$, then
a FORWARD command is input, making the audio playback advance to the midpoint

between t.sub.m and t.sub.e.

Detailed Description Text (74):
An issue understandably arises as to how the audio tracks are played or the
speakable commands recognized.

Detailed Description Text (79):
pagetype<audio track>;

Detailed Description Text (81):
The pagetype indicates whether the page is a directory page or an Audio Web page.
(A distinction is required here because directory pages are played cyclically
whereas Audio Web pages are not.) The description of the hyperaudio links in the
page is given after the entire audio track. This allows the entire audio track to
be sent as a unit, preferably in a convenient data-compressed format (which may be
conventionally known). Hyperaudio links have three components: link number
(subscript i above), a pair of elapsed time values (relative to the beginning of
the entire audio track) that represent the beginning t.sub.i.sup.b and end
t.sub.i.sup.e of the portion of the audio track that serves as the hyperaudio link
name, and finally, the HATP address of the page to which the hyperaudio link
points.

Detailed Description Text (89):
2. The ACCEPT-ENCODING header line specifies the encoding format of the HAML
document (e.g., x-compress, x-zip, etc.) and the compressing format for the audio
track (e.g., MPEG).

Detailed Description Text (92):
Generally, the client runs the HATP protocol to request and receive HAML page
descriptions. It also recognizes and implements the above-described set of commands
(e.g., STOP, FORWARD, BACK, PLAY, PRESET, etc.). Finally, the client plays the
audio tracks from Audio Web pages.

Detailed Description Text (94):
While a page is playing, the user may issue the STOP command. At that point the
browser stops playing the audio track, and builds up the dynamic menu window
including the last k links in the audio track prior to the point at which the STOP
command was issued.

Detailed Description Text (95):
In order to do this, the browser tracks the elapsed time from the beginning of the
audio track and also records the time at which the STOP command was issued. This
time is represented as t.sub.S. Thereafter, the Audio Web browser in the client
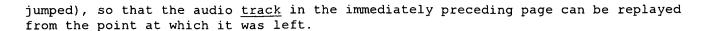follows the following algorithm.

Detailed Description Text (109):
In terms of elapsed time, t.sub.1 and t.sub.r are the beginning and ending
endpoints, respectively, of an audio track in question, with t.sub.S being the
starting point of the audio track. At the start of playback, t.sub.1 =t.sub.S =0.
As mentioned above, t.sub.r is set equal to the end time of the audio track.

Detailed Description Text (111):
Stop playing the audio track

Detailed Description Text (120):
3. The RETURN command is used to order the browser to retrieve the page that
immediately preceded the current page. Preferably, the browser maintains a memory
cache to store the page immediately preceding the current page. More preferably,
the browser should remember the state in which the immediately preceding page was
left, (by, for example, caching the hyperaudio link number to which the user

jumped), so that the audio <u>track</u> in the immediately preceding page can be replayed from the point at which it was left.

CLAIMS:

4. The system in accordance with claim 3, wherein said home page is a directory page having audio data corresponding to a repeating audio <u>track</u>.

5. The system in accordance with claim 4, wherein said repeating audio <u>track</u> includes a plurality of cross references to audio pages in a level of said hierarchy below said home page.

9. The system in accordance with claim 8, wherein said means for controlling the transfer of said audio data includes means for inputting commands for controlling said repeating audio <u>track</u> of said directory.

10. The system in accordance with claim 9, wherein said means for inputting commands includes means for inputting a command to stop playback of said repeating audio <u>track</u>.

11. The system in accordance with claim 10, wherein said client includes means for identifying a subset of said plurality of cross references in said repeating audio <u>track</u> immediately prior to receiving said command to stop playback of said repeating audio <u>track</u>.

14. The system in accordance with claim 13, wherein said cross references in said subset correspond to a set of cardinal numbers, wherein said means for inputting commands for controlling said repeating audio <u>track</u> include means for inputting a cardinal number for selecting one of said cross references in said subset whereby a page corresponding to said selected cross reference is transferred to said client via said audio data transfer connection.

15. The system in accordance with claim 14 wherein said means for inputting commands includes means for inputting a resume playback command of said audio <u>track</u>.

16. The system in accordance with claim 15 wherein said means for inputting commands includes means for inputting search commands whereby said repeating audio <u>track</u> can be searched to find a desired cross reference.

17. The system in accordance with claim 16 wherein said search commands include a forward command for advancing playback of said repeating audio <u>track,</u> relative to a given instant, by an interval of time, and a back command for receding playback of said repeating audio <u>track,</u> relative to given instant, by an interval time.

18. The system in accordance with claim 17 wherein said intervals of time by which playback of said repeating audio <u>track</u> is advanced or receded are variable in accordance with a binary search algorithm.

34. The method in accordance with claim 33 wherein said step of receiving further comprises the substep of transmitting from the server said audio page identified by said message request, and wherein said audio page includes a pagetype identifier for indicating that said audio page is a directory page having a repeating audio <u>track</u> or an audio web page having a linear audio <u>track</u> and hyperaudio links after said audio <u>tracks,</u> said hyperaudio links having a link number, a pair of elapsed times, and an address to which said hyperaudio links points.

43. The system in accordance with claim 42 wherein said means for inputting commands includes means for inputting search commands whereby said repeating audio <u>track</u> can be searched to find a desired cross reference.

☐   Generate Collection   Print

L10: Entry 1 of 1   File: USPT   Jul 20, 1999

DOCUMENT-IDENTIFIER: US 5926789 A
** See image for **Certificate of Correction** **
TITLE: Audio-based wide area information system

Brief Summary Text (8):
It can be seen in the foregoing conventional systems that audio is still
substantially a secondary object. First, the bulk of the information on a WWW page
is simply not audio information. Second, the user still requires a visual interface
to enable navigation, even with, for example, the TI speech interface.

Brief Summary Text (11):
However, in applications where attempts have been made to use audio as the primary
operational medium, such as phone menu systems (such as voice mail), such systems
frequently overwhelm a user by requiring the user to memorize menu lists, yet
presenting so much information in such lists that recollection is made difficult or
impossible.

Drawing Description Text (4):
FIG. 3 illustrates an option menu "window" from a cycling directory page;

Drawing Description Text (6):
FIG. 5 conceptually illustrates the process of navigating a directory page; and

Detailed Description Text (4):
The virtual audio client (interchangeably referred to herein as "client") is the
means by which a user navigates the Audio Web. As illustrated in FIG. 1, the client
can recognize several inputs and commands. For example, the client may recognize
the input of the first five cardinal numbers (one through five), and the commands
STOP, PLAY, FORWARD, BACK, PRESET, DELETE, RETURN, and GO.

Detailed Description Text (41):
A user is provided with a way to search the Audio Web to locate audio pages of
interest using a directory service. As seen in the foregoing hypothetical example,
such a navigation means through the Audio Web is vital. In the example, the first
three pages retrieved were directory pages that were "stacked" according to the
hierarchical structure shown in FIG. 2.

Detailed Description Text (43):
The user can input commands and other information (via the client) to control
navigation through the Audio Web. The user could, for example, jump back to the
Something New page after finishing with the Anthology page, then back to the
Beatles page again, using appropriate navigational commands, as discussed below.

Detailed Description Text (44):
The user can also place a bookmark to mark a particular audio page, thereby
enabling a direct jump to that page instead of navigating through one or more
directories. Furthermore, a bookmark list is provided to catalog a user's selected
bookmarks.

Detailed Description Text (47):
To let users find pages of interest, the following schema of directories is used.
When downloaded, each directory is a stream of menu choices that is cyclically
presented to the user in an audible manner. The directory format is, of course,
use-specific, but is preferably informative, entertaining, and, most importantly,
searchable. The user's first contact with the Audio Web is with a home directory
page 10, similar to a "home page" page on the WWW (see FIG. 2). This home directory
page 10 contains hyperaudio links 16 to one or more sub-directory pages 12. This
structure continues for a number of levels, forming a hierarchical tree structure
such as the one generally depicted in FIG. 2. The directory pages 14 (leaf nodes)
in a last, or lowermost, level are individual audio pages that have been registered
in the directory page.

Detailed Description Text (48):
The stacked "tree" organization shown in FIG. 2 is desirable because the fanout of
links is kept to a reasonable number while providing manageable indexing for a
large number of audio pages. The tree organization used here is comparable to the
B-tree organization commonly used in database management systems. Each audio page
has a maximum number of audio links and fixed capacity for audio information. This
is advantageous because the user is not overwhelmed by extraneous information
clutter while listening to a directory page, and, more importantly, the number of
choices in any given option menu does not become excessive, such that the user is
burdened by having to remember large numbers of choices.

Detailed Description Text (51):
As mentioned above, when a user first connects to an Audio Web server, the first
audio page the user encounters is a home directory page, which is in the form of a
repeating audio track, generally listing a plurality of hyperaudio links. In order
to use this directory, the user issues a STOP command from the client, (for
example, when an audio link of interest is heard). The directory then provides an
option menu consisting of the last k (for example, five) hyperaudio links located
before the STOP command was issued. FIG. 3 illustrates the concept of the repeating
directory page, and, more specifically, the set of k hyperaudio links defined in a
window according to a STOP command issued by the user.

Detailed Description Text (57):
up to the kth hyperaudio link. The user then makes a selection by inputting the
corresponding number via the client. The system therefore defines a dynamic option
menu based on a time-based window of the past k links. It will be appreciated that
this concept of a dynamic window guarantees that the user will be presented each
time with a set of k options, regardless of the fanout (i.e. the total number of
hyperaudio links defined on the given audio page). This is advantageous because the
user need only deal with a relatively small number of options at any one time,
keeping the selection thereof manageable.

Detailed Description Text (67):
As was explained relative to FIG. 4, when this approach is repeated, the search
arrives at the target item relatively quickly. When the user finally arrives at the
target item, the user issues a STOP command. Thereafter, the above-described
dynamic menu window is built, based on the target item.

Detailed Description Text (68):
Once the user selects a hyperaudio link from the dynamic menu window, the
corresponding audio page is sent to the client from the server, and the above-
described process begins over. More specifically, if the newly selected audio page
is a directory, the user will hear again repeated audio information, as described
above. If the newly selected audio page is an Audio Web page, then the user hears
the audio information contained therein, and can use it as desired. FIG. 5
illustrates the concept of the navigating the Audio Web according to the present

invention.

Detailed Description Text (69):
Audio Web pages are processed in a manner similar to directory pages. The only
substantive difference is that Audio Web pages are not repeated as directory pages
are. The user receives the information linearly, as presented in the description of
the page. When hearing this audio information, the user can use the STOP command,
which prompts a menu of choices formed by the last k hyperaudio links in the page,
as illustrated in FIG. 3. Thereafter, the user can select a number corresponding to
the hyperaudio link of choice, and branch or jump to the new page corresponding to
that hyperaudio link (see, again, FIG. 5).

Detailed Description Text (94):
While a page is playing, the user may issue the STOP command. At that point the
browser stops playing the audio track, and builds up the dynamic menu window
including the last k links in the audio track prior to the point at which the STOP
command was issued.

Detailed Description Text (98):
menu.O slashed.(to make the menu window initially empty);

Detailed Description Text (100):
GL (Get Link): next link i, searching backwards if item i is in menu yet

Detailed Description Text (103):
insert item<m, link name, link address, t.sub.i.sup.b, t.sub.i.sup.e >into menu.

Detailed Description Text (106):
ST: play the menu items in the menu list and wait for choice (a number from 1 to 5)

Detailed Description Text (123):
6. The GO command prompts the browser to start playing back the bookmark list as a
repeating stream, thereby treating the bookmark list as a variant of the directory
system described previously. After the GO command is used, the system proceeds
until the user uses the STOP command in order to create a dynamic menu window, or
the FORWARD or BACK commands to perform a binary search of the bookmark list.

Detailed Description Text (128):
In order to illustrate the concept of DHR, a comparison is made in FIG. 6 to the
radio transmissions of an international radio broadcast by, for example, the
British Broadcasting Corporation ("BBC"). An individual listening to the BBC in New
York City, for example, would tune a radio to a frequency used by a BBC repeater
station. Using DHR, however, a list of hyperaudio links are broadcast using part of
the available frequency band, in a manner similar to the explanation above. In
effect, a radio transmission has the format of an Audio Web page using the HAML
format. Each hyperaudio link points to a respective Audio Web server which provides
more information about the topic named in the link. In this arrangement, therefore,
the audible broadcast radio transmission consists only of news headlines, for
example, while the respective full news stories are obtained in the Audio Web pages
pointed to by the radio transmission "page". Using a specially equipped radio
transceiver as the client, a listener stops the transmission of the news headlines,
get a menu of links, select a topic of interest, and download the corresponding
full news story from an Audio Web server.

Detailed Description Text (131):
For video information, directory pages might consist of cyclical streams of
"trailers" (i.e., short clips from programs used to entice a viewer to view the
entire program). The user stops the directory stream using the STOP command, and a
dynamic menu window is created. The menu window displays five (for example) video

still frames, one from each of the five trailers shown immediately prior to the use of the STOP command. The user then chooses one of the programs by inputting ONE, TWO, . . . , FIVE. Preferably, each trailer shown in the initial directory page would be overviews of a common topic, such as "Music". Thus, having selected on the initial trailers, the user sees another cyclical stream of trailers related to the common topic of the initial trailer.

Detailed Description Text (132):
Once the right video page is found, the user receives the page as a video program. The page also includes hypervideo links that each point to a different video page. As with the Audio Web, the user stops the video playback at any time during the program and builds the dynamic menu window of the last, for example, five hypervideo links identified in the program up to that point. Selecting one of the hypervideo links from the menu causes the client to download the corresponding video program from a server and start playing it.

Detailed Description Text (135):
Text information is also managed according to the present invention. For example, a ticker-type display of text can be used to show a cycling directory page. As before, the user stops the display at a desired location, builds a dynamic menu window, and selects an item of interest. When the desired text page is reached, it is displayed in a limited state, or elsewhere, if an extra real state is available.

Detailed Description Text (137):
Using TextWeb, a user uses a hand-held computer unit (sometimes known as Personal Digital Assistants, or PDAs) as the client. A PDA typically has limited computing ability and a small visual display. Nonetheless, the user can satisfactorily uses a PDA to display directory pages, dynamic menu windows, and text pages. Moreover, the user may request full text pages to be sent to other devices where they can be more easily read, such as a fax machine in a fax-on-demand mode.

Detailed Description Text (139):
It will be appreciated that this invention encompasses new browsers and navigators for the WWW as well. In particular, cyclical directories may be incorporated into the currently known methods of WWW navigation.

CLAIMS:

33. In a wide area information system having at least one server, each server having at least one audio page having audio data and means for recognizing sound commands, and a client, and wherein information is stored entirely in the form of the audio page and the system is navigated without the use of text or a visual display, a method for presenting the audio data to a user comprising the steps of:

establishing a connection from the client to the server;

sending a sound request message having an identifier from the client to the server for one of said at least one audio page;

receiving at the client said requested audio page having audio data identified by said message request from the server;

ending said connection; and

presenting, at the client, said received audio page to the user.

35. The method in accordance with claim 34 wherein said presenting step further includes the steps of:

providing, at the client, a selection <u>menu</u> having a plurality of choices to the user, each of said plurality of choices corresponding to a portion of said received audio data;

selecting, at the client, one of said plurality of choices corresponding to a portion of said received audio data from said selection <u>menu</u>; and

transferring said portion of said received audio data from the client to the server such that said audio data corresponding to said selected one is received at the client.

37. The method in accordance with claim 36, wherein said step of providing a selection <u>menu</u> comprises:

presenting a first set of said plurality of choices in a sequence;

stopping said presentation of said first set of plurality of choices; and

presenting a second set of choices from among said first set of a choices whereby said second set makes up said selection <u>menu</u>.